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QM01/0807

EXAMINER

PRICE, C

ART UNIT

PAPER NUMBER

3743

DATE MAILED:

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action SummaryApplication No.
08/954,291Applicant(s)
TAYLORExaminer
CARL D. PRICEGroup Art Unit
3743☒ Responsive to communication(s) filed on Aug 7, 1998☐ This action is **FINAL**.☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims☒ Claim(s) 1-120 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.☒ Claim(s) 1-120 is/are rejected.☐ Claim(s) _____ is/are objected to.☐ Claims _____ are subject to restriction or election requirement.**Application Papers**☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.☐ The drawing(s) filed on _____ is/are objected to by the Examiner.☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.☐ The specification is objected to by the Examiner.☐ The oath or declaration is objected to by the Examiner.**Priority under 35 U.S.C. § 119**☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.☐ received in Application No. (Series Code/Serial Number) _____.☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).**Attachment(s)**☒ Notice of References Cited, PTO-892☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 5☐ Interview Summary, PTO-413☐ Notice of Draftsperson's Patent Drawing Review, PTO-948☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Reissue Applications

1. Claims 1-120 are presented for examination. Claims 1-68 are the original patent claims .
2. This reissue application was filed with the required offer to surrender the original patent. The original patent, or an affidavit or declaration as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.
3. The reissue oath/declaration filed with this application is defective because it fails to **identify at least one error which is relied upon to support the reissue application.** See 37 CFR 1.175(a)(1) and MPEP § 1414. The reissue oath/declaration filed with this application is defective because it fails to contain the statement required under 37 CFR 1.175(a)(1) as to applicant's belief that the original patent is wholly or partly inoperative or invalid. See 37 CFR 1.175(a)(1) and see MPEP § 1414. Note that 37 CFR 1.175(a) (1) clearly requires the reissue declaration generically state why the patent is wholly or partially inoperative or invalid in terms of (1) claiming more or less than applicant had the right to claim, (2) a defective specification, and/or (3) a defective drawing.
4. The reissue declarations of record only indicate that the patent is wholly or partially inoperative or invalid because of one generic problem, i.e.- claiming less than the patentee had a

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right to claim. However, applicant also seeks to amend the specification and the Drawings to correct errors therein. Accordingly, the reissue declaration must be amended to additionally generically indicate that the patent is wholly or partially inoperative or invalid because of the defective specification and drawings.

In accordance with 37 CFR 1.175(b)(1), a supplemental reissue oath/declaration under 37 CFR 1.175(b)(1) must be received before this reissue application can be allowed.

5. Claims 1-120 are rejected as being based upon a defective declaration under 35 U.S.C. 251. See 37 CFR 1.175. The nature of the defect is set forth above.

Receipt of an appropriate supplemental oath/declaration under 37 CFR 1.175(b)(1) will overcome this rejection under 35 U.S.C. 251. An example of acceptable language to be used in the supplemental oath/declaration is as follows:

"Every error in the patent which was corrected in the present reissue application, and is not covered by a prior oath/declaration submitted in this application, arose without any deceptive intention on the part of the applicant."

IMPROPER RECAPTURE

6. Claims 69-84 and 98-120 are rejected under 35 U.S.C. 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based. See *Hester Industries, Inc. v. Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998); *In re Clement*, 131 F.3d 1464,

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45 USPQ2d 1161 (Fed. Cir. 1997); *Ball Corp. v. United States*, 729 F.2d 1429, 1436, 221 USPQ 289, 295 (Fed. Cir. 1984). A broadening aspect is present in the reissue which was not present in the application for patent. The record of the application for the patent shows that the broadening aspect (in the reissue) relates to subject matter that applicant previously surrendered during the prosecution of the application. Accordingly, the narrow scope of the claims in the patent was not an error within the meaning of 35 U.S.C. 251, and the broader scope surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application.

During the prosecution of patent application serial number 08/163,424, which issued as U.S. Patent 5,458,483, in order to distinguish the claimed invention over the prior art and to obtain allowance of the patent sought, the following language was added, in paper no. 5, to independent claim 1:

“means for discharging fuel into the flame chamber formed in the burner block, the discharging means including a nozzle extending through the chamber means and the first aperture means formed in the base wall to discharge fuel into the flame chamber.”

In paper no. 5, independent claim 9 was also amended and distinguished over the prior art by the claimed “provision of a modular fastening means including frame positioned to lie between the base wall of the oxygen-supply housing formed to include first and second apertures and the burner block as recited.”

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In paper no. 5, independent claim 61, was added in paper no. 5, and was argued to distinguish over the prior art of record which allegedly did not "disclose or suggest provision of an oxygen-supply housing having a pyramidal hollow shell appended to a base wall as recited."

Of the new claims presented in the reissue application, claims 69, 85, 98, 101, 110 and 11 are independent.

Reissue claim 69 omits the limitation of patented claim 1 that the nozzle discharge means extends through ^{the}eh chamber means and the first aperture means is formed in the base wall.

Reissue claim 85 includes the limitations added to claim 1 above to overcome the prior art.

Reissue claims 98, 101 and 110 omit the limitation that the means for discharging fuel into the flame chamber formed in the burner extends through eh chamber means to discharge fuel into the flame chamber.

Reissue claim 110 also omits the limitation that eh aperture through which the discharge nozzle extends is formed in the base wall.

Reissue claim 11 omits the limitations that the nozzle fuel discharge means extends through the chamber means and the aperture is formed in the base wall.

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Reissue claims 69,98,101,110 and 1 therefore attempt to impermissible recapture some of the subject matter added to the patent claim 1 to render that claim distinguishable over the prior art of record, for the reasons set forth above.

Drawings

7. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 08-07-1998 have been approved by the examiner.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

9. Claims are rejected under 35 U.S.C. 102(b) as being anticipated by GREAT BRITAIN '703.

GREAT BRITAIN '703 shows (figures 1 and 2) a modular removable (see page 1, lines 58-61) removable oxygen (e.g.- oxygen as a part of the air supplied) supply means

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defined by a housing (10), a base a wall (15) defining a primary oxidant and fuel nozzle openings (20) and secondary oxidant metering passages (23) which are smaller in diameter (see page 2, line 128 - page 3, line 3) than matching oxidant bypass passages (23) formed in the burner block (21) which also defines a primary combustion chamber (11,22). The fuel nozzle of GREAT BRITAIN '703 includes a primary air metering and a support means (19). Primary combustion occurs within the burner block chamber (22) and secondary combustion occurs outside of the burner block exit opening (see page 3, lines 10-17).

10. Claims 1-4,8,21,29,30,54-59,85-88,93,110,111 and 114 are rejected under 35 U.S.C. 102(b) as being anticipated by BOELSMA.

BOELSMA shows a modular removable oxygen (e.g. - oxygen as a part of the air supplied) supply means defined by a housing (7,11), a base a wall (15) defining a primary oxidant and fuel nozzle opening (5) and secondary oxidant bypass passage (3,8).

BOELSMA further includes a burner block (13) defining a primary combustion chamber (18). The fuel nozzle of BOELSMA includes a primary air metering and a support means (6) and an annular removable fixture at the lower "tip" of the housing (not referenced; located above reference character 4 and around fuel pipe).

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11. Claims 1-10,14,21-26,29,30-34,54-59,69-72,74-76,78-82,85-93,99 and 110 are rejected under 35 U.S.C. 102(b) as being anticipated by KRIEGER.

KRIEGER shows (figure 3) a modular removable oxygen (e.g.- oxygen as a part of the air supplied) supply means defined by a housing (32), a base a wall (not referenced) defining a primary oxidant and fuel nozzle opening (not referenced) and secondary oxidant bypass passages (50). KRIEGER further includes a burner block (46,48) defining a primary combustion chamber (44). The fuel nozzle of KRIEGER (36) includes a primary air metering and a support means (36). KRIEGER includes a frame 9 not referenced; figure 3) for removably fastening, with bolts, the oxidant/air supply housing to the burner block.

12. Claims 1-10,12,14,21-26,29-34,36-59,69-72,74-76,78-93,99 and 100-110 are rejected under 35 U.S.C. 102(b) as being anticipated by JANSSEN.

JANSSEN shows a modular removable oxygen (e.g.- oxygen as a part of the air supplied) supply means defined by a housing (12), a base a wall (10) defining a primary oxidant and fuel nozzle opening (32) and secondary oxidant bypass passages (5). JANSSEN further includes a burner block (6) defining a primary combustion chamber. The fuel nozzle of JANSSEN (33,45) includes a ring shaped primary air metering (30,34) support means. JANSSEN includes a frame (3) for removably fastening, with bolts (2),

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the oxidant/air supply housing to the burner block. In regard to claim 12, JANSSEN shows a collar (25,27) threaded to the hollow shell via bolts (8).

13. Claims 1-10,14,21-26,29-34,36-59,69-72,74-76,78-93,99 and 100-110 are rejected under 35 U.S.C. 102(e) as being anticipated by SYSKA ET AL.

SYSKA ET AL shows a modular removable oxygen (e.g.- oxygen as a part of the air supplied) supply means defined by a housing (10), a base a wall (not referenced) defining a primary oxidant and fuel nozzle opening (60,62) and secondary oxidant bypass passages (36), or alternatively an annular passage (see 136; figure 11). SYSKA ET AL further includes a burner block (65,76) defining a primary combustion chamber (64). The fuel nozzle of SYSKA ET AL (14) includes a ring shaped primary air metering (34,38) support means. SYSKA ET AL includes a frame (78) for removably fastening, with fasteners (not shown), the oxidant/air supply housing to the burner block.

14. Claims 11-120 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by BROWN ET AL '760.

BROWN ET AL '760 shows (figure 1) an internally threaded removable collar (not referenced) engaging an externally threaded rim or lip (not referenced), extending to the rear of a hollow oxygen supply housing (22,82,84), and engaging a flange (not referenced) on the rear external end (32) of a fuel nozzle (30) which has a tip (50)

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extending through a base wall opening (14) and positioned, in use in, within the inlet passage of a burner block (98).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 1-12,14,15-17,20-26,29-35,37-61,63,64,69-82,85-94,99 and 100-110 are rejected under 35 U.S.C. 103(a) as being unpatentable over GREAT BRITAIN '703, JANSSEN or SYSKA ET AL in view of BROWN ET AL

Each of GREAT BRITAIN '703, JANSSEN and SYSKA ET AL disclose the invention substantially as set forth in the claims with possible exception to the use of pure oxygen as the source of oxidant for combustion of the fuel.

BROWN ET AL teaches, from the same combustion field of endeavor as JANSSEN and SYSKA ET AL, using pure oxygen rather than air to support combustion as a means of reducing the amount of nitrous oxides produced, due to the lack of nitrogen in the oxygen.

In regard o claims 1-12,14,21-26,29-34,37-59,69-72,74-76,78-82,85-93,99 and 100-110, for the purpose of reducing the amount of nitrous oxides formed during

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combustion , it would have been obvious to one with ordinary skill in the art to modify the GREAT BRITAIN '703, JANSSEN and SYSKA ET AL burners to receive oxygen rather than the disclosed air, in view of the teaching of BROWN ET AL. In regard to claims 11,15,16,17,20,35,60,61,63,64,73,77 and 94, since the shape of the hollow air supply shell, the placement of the oxygen supply fitting thereon, the shape of the burner block and base wall, etc. would depend on numerous design concerns such as the overall size of the burner, the shape of the space the burner would occupy in use, etc., to for the hollow shell to be pyramidal with triangular sides, to form the base to be rectangular with four second stage oxygen apertures, to form the passageways to be arcuate, etc. can be viewed as nothing more than mere matters of choice in design absent the showing of any new or unexpected results produced therefrom over the prior art of record. In regard to claim 64 and 95, JANSSEN shows a collar (25,27) threaded to the hollow shell via bolts (8).

Allowable Subject Matter

17. Claims 13,96 and 113 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mellas shows an internally threaded removable collar (9) engaging an externally threaded rim or lip (6,7), extending to the rear of a hollow oxygen supply housing (14), and engaging a flange (6) on the rear external end (5) of a fuel nozzle.

Zink et al shows metering holes (46) for determining the flow of secondary oxidant through a burner block bypass (70). See also Hovis '491 (46), Spire (15), Meyer (13,14), Schramm et al (29) and Nagai (Sa).

Rothhaar, Hovis et al '062 and Cleaver et al all show burner blocks with bypass oxidant passages.

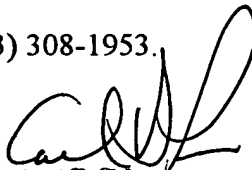
Coppin and Maxon, Jr. show pyramidal shaped burner housings.

GENERAL INFORMATION

19. Applicant is reminded of the continuing obligation under 37 CFR 1.56 to timely apprise the Office of any litigation information, or other prior or concurrent proceeding, involving Patent No. 5,458,483, which is material to patentability of the claims under consideration in this reissue application. This obligation rests with each individual associated with the filing and prosecution of this application for reissue. See MPEP §§ 1404, 1442.01 and 1442.04.

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20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Price whose telephone number is (703) 308-1953.



Carl D. Price
Primary Examiner

C.P.
July 27, 2000